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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/005,902 | 12/04/2001 | Dale Brown | 5369/00015 | 7185 |
| 22910 7590 01/16/2007 BANNER & WITCOFF, LTD. 28 STATE STREET 28th FLOOR BOSTON, MA 02109-9601 | | | EXAMINER GEMBEH, SHIRLEY V | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 1614 | |
| SHORTENED STATUTORY PERIOD OF RESPONSE | | MAIL DATE | DELIVERY MODE | |
| 3 MONTHS | | 01/16/2007 | PAPER | |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/005,902 | Applicant(s) BROWN ET AL. | |
| | Examiner Shirley V. Gembeh | Art Unit 1614 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 November 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-14 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7 and 9-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

The response filed **November 1, 2006** presents remarks and arguments to the office action mailed **June 2, 2006**. Applicants' request for reconsideration of the rejection of claims in the last office action has been considered.

Applicants' arguments, filed, have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Status of claims:

Claims 2-7 and 9-14 are pending.

Claims 2-7 and 9-14 are rejected.

Response to Amendment

Claim Rejections - 35 USC § 103

Claims 2-7, 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller US 5,129,824 ('824) in view of Hill US 5,993,784 (784) and Kim et al US, 6,045,800 ('800) further in view of Petrus US 5,875,798 ('798).

Applicant traverses: that the Keller patent does not teach or suggest "self-treatment by administering soft abrasives into the supraginival tooth surfaces with tooth

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brushing " Hill is directed to an abrasive toothpaste and that Hill does not mention other methods of cleaning the teeth (see page 6 of remarks).

Next, that Kim is directed to the addition of anti-inflammatory agents to treat periodontal disease and does not specify which tooth surfaces are brushed, nor mention other methods of cleaning.

Also, that Petrus teaches a medicated toothpick.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

As combined the references teach each limitations of the claims, and the Keller reference was combined with the cited references of record to show obviousness. All the teachings of the claimed invention does not need to be addressed by a single reference, but the teaching of the combined references and combined with the knowledge of one of ordinary skill in the art.

In particular Hill teaches an abrasive, which Examiner interprets' to mean as a soft abrasive. Again, Hill teaches administering soft abrasives onto gingival surfaces-supragingival (col.2 lines 4-50) (on/base) and subgingival-deepened gingival sulcus (periodontal pockets) with a toothbrush. With regards to a soft abrasive Hill teaches the particles to be from 3-25 micron (see col. 7, lines 21-39) as defined in Table 2 as pointed out by Applicant.

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Similarly, Petrus which Applicant argues does not teach a tooth brush, nonetheless teaches the cleaning of the teeth and tooth picks in treating periodontal disease that may predispose individuals with cardiovascular disease (heart) as in instant claims 2, 7 and 19. Cardiovascular disease is defined as relating to, or involving the heart and the blood vessels: (*cardiovascular disease*).

Further Kim which is directed to the treatment of is properly combined as a reference and to that extent may not teach the brushing of tooth surfaces but does teach an anti-inflammatory agent to the dentifrices (see col. 1 lines 54-65) where the therapeutic substance/agent is chlorohexidine gluconate, cetylpyrridium chloride, triclosan (cited at col. 1 lines 54-57). A dentifrice is a tooth paste. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the Kim et al. reference the subject matter of current claim 7, which is directed to adding an anti-inflammatory agent to the dentifrices (see col. 1 lines 54-65) where the therapeutic substance/agent is chlorohexidine gluconate, cetylpyrridium chloride, triclosan (cited at col. 1 lines 54-57).

Applicant's arguments have been fully considered but they are not persuasive and the rejection is therefore maintained as in the office action of record.

No claim is allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley V. Gembeh whose telephone number is 571-272-8504. The examiner can normally be reached on 8:30 -5:00, Monday- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel can be reached on 571-272-0718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SVG
1/04/06


ARDIN H. MARSCHEL
SUPERVISORY PATENT EXAMINER